

Science Homework #12

SECTIONS 3A, B, C, D, & E

NOVEMBER 4-8, 2024

Homework

Science Fair Project Packet:
Complete packet **pages 10, 11, and 12 (Due Friday 11/8)**

- **Page 10**
 - ✓ Write your results. Write your experiment data in a narrative summary form.
- **Page 11**
 - ✓ Write your conclusion by making sure you answer the questions at the top of the page.
- **Page 12**
 - ✓ Write your applications. Read and follow the directions at the top of the page.

Topic 1b Study Guide (Due Tuesday 11/12/24)

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Vocabulary

[Topic 1b Earth in Space and Time Vocabulary Quizlet](#)



Reminders

- Homework #12 (Orange Folders) due Friday, 11/8/24
- Topic 1b Test Wednesday, 11/13/24



Topic 1b Earth in Space and Time - Study Guide

Word Bank

30 gases largest star hydrogen

The Sun is a _____!

Stars, like our Sun, are giant balls of hot _____ that produce both light and thermal energy. They are mostly made of _____ and helium.

By Earth measurements, the Sun weighs 2 followed by _____ zeros kilograms! Our Sun is the _____ object in our solar system.

Word Bank

energy photosphere water cycle corona sunspots
light hot photosynthesis cooler thermal

While the real Sun looks quite different from Jamie's drawing, the crown that Jamie drew exists on the real Sun as well. It is called the "_____", which is Latin for "crown".

Inside this corona is the gas ball of the Sun. The outer surface of gases that we can see is called the _____. These bright areas on the Sun are especially _____ areas.

The dark spots are called _____. Sunspots are areas on the photosphere where the temperature is _____ than the areas surrounding them.

The Sun is Earth's main source of _____. It provides the _____ energy that plants need for _____.

It also powers the _____, and keeps the planet from freezing over.

Word Bank

*photosphere coolest star sunspots fusion
corona helium six heat*

The Sun is actually a _____

The Sun is actually made of gases like hydrogen and _____

The process of _____ gives out light and heat energy, which is what makes the Sun glow.

This energy reaches us on Earth as sunlight and _____

The Sun has _____ layers.

The six layers are core, radiation zone, convection zone,
_____, chromosphere, and _____

What are those dark regions on the Sun's surface?

Those are called _____

They are the _____ places on the Sun, but they are still very hot!

Word Bank

*Earth's nonmagnetic gravity aluminum iron pointing magnetic pulls
invisible*

_____ is the force with which two objects pull each other.

_____ gravity pulls every object toward it.

Like Earth, a magnet also has an _____ force, called magnetic force that pulls objects toward it.

While Earth's gravity pulls all objects, the magnetic force around magnets pulls objects made of certain materials, such as _____. These materials are called _____ materials.

Objects made of _____, wood, and plastic are not attracted to magnets because they are _____.

Gravity is a force that always _____ two objects together. But magnetic force can pull two magnets together or push them apart depending on which way they are _____.

Word Bank

powerful, telescope, bigger, magnifying, planets, lenses, closer, craters, faraway, far, color

Mia and Ava are trying to find the brightest star in the night sky. The Moon is out tonight, and Ava thinks she has spotted a rabbit on the Moon. Mia says it looks more like a face. What makes these shapes on Moon? Let's help Ava and Mia find out.

The Moon doesn't seem very different when viewed using the _____ glass or the binoculars.

But with the _____, they can see _____ on the Moon's surface. Why does the Moon look different when viewed with a telescope?

A telescope is a tool that allows people to see _____ objects that would otherwise not be seen clearly.

A telescope is like a powerful magnifying glass. It uses _____ and mirrors to collect light from distant objects and make the image bigger.

Which objects in the sky can you see without a telescope?

The Sun and the Moon can be seen without a telescope because they are _____ to Earth than other objects in the sky and can be seen from a distance.

We can see stars too, but like the planets, they look like tiny specks in the sky. This is because they are very _____ away from Earth.

Objects like the stars and planets that look small from Earth can be very large if we could get closer to them.

Some of them are much _____ than the Sun.

Mia may have spotted a planet far away as she looks through the telescope. How does the planet look different when viewed with and without a telescope?

We can see the shape and _____ of the planet better with a telescope because it looks so much bigger.

How do telescopes help scientists?

Scientists use telescopes that are much bigger and more _____ to discover and study _____, star clusters, galaxies, and learn more about the objects in the sky.

Scientists use much bigger and more powerful telescopes to view other objects in the sky that are not visible to us.